Smarter Balanced assessments are coming in only two years: Are you ready?

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2013 OPI Assessment and Data Conference

January 10, 2013   Billings, MT

A Next Generation of Assessments

US Dept. of Ed has funded two consortia of states with development grants for new assessments aligned to Common Core State Standards

- Rigorous assessment of progress toward "college and career readiness"
- Common cut scores across all Consortium states
- Provide both achievement and growth information
- Valid, reliable, and fair for all students, except those with "significant cognitive disabilities"
- Administered online
- Use multiple measures
- Operational in 2014-15 school year

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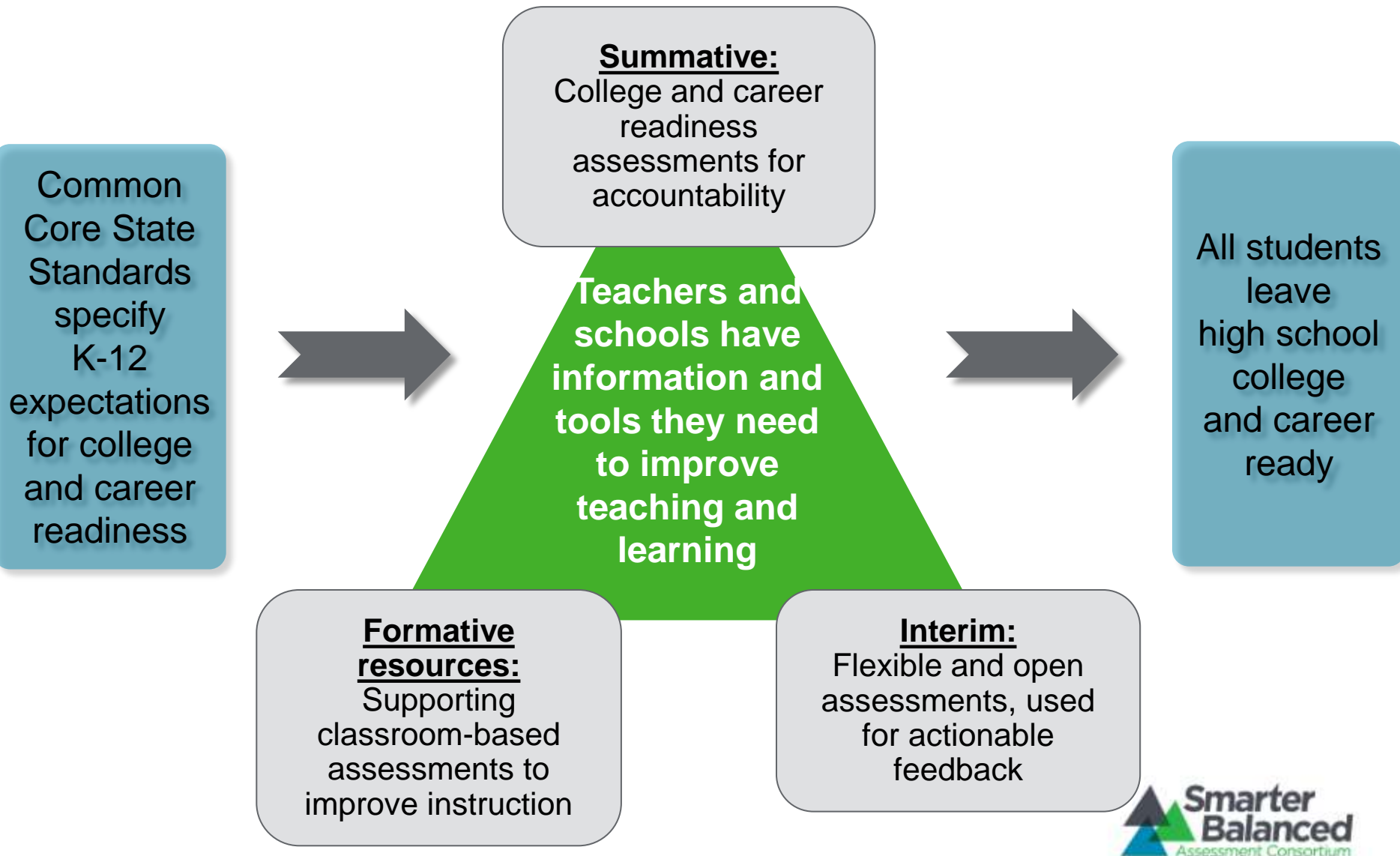Assessment Consortium

A National Consortium of States

- 25 member states

- 21 governing, 4 advisory states

- Washington is fiscal agent

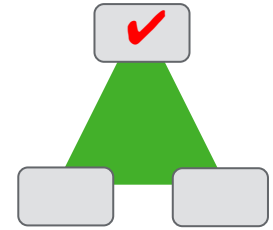- WestEd provides project management services

Governing State

Advisory State

Membership status as of August 16, 2012

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The Smarter Balanced Assessment System

A Balanced Assessment System

Common Core State Standards specify K-12 expectations for college and career readiness

Summative: College and career readiness assessments for accountability

Teachers and schools have information and tools they need to improve teaching and learning

Formative resources: Supporting classroom-based assessments to improve instruction

Interim: Flexible and open assessments, used for actionable feedback

All students leave high school college and career ready

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Summative Assessments for Accountability

Computer Adaptive Testing (CAT) Portion
- Built on solid technology
- Coverage of full breadth/depth of Common Core
- Precise assessment of all students

Performance Task (PT) Portion
- Deeper learning with thematic and scenario-based tasks
- Real-world problems aligned to Common Core
- PT scores combined with CAT for overall score

Setting College/Career Ready Performance Standards
- Wide review of Achievement Level Descriptors (ALDs)
- Field tests include PISA, TIMSS, NAEP items
- Online opportunity for broad engagement

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Interim Assessments to Signal Improvement
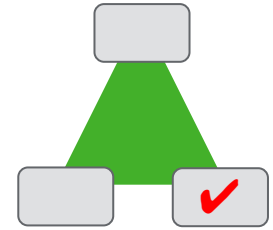
|	
Flexible and Open	• Non-Secure • Timing and frequency are locally determined • Interim test-builder creates aligned assessments
Supports Proficiency Based Instruction	• Teachers can match assessments with scope and sequence • Teachers can review student responses • Teachers can score student responses
Authentic Measures	• Includes full range of item types • Uses the same scale as the Summative Assessment • Includes performance assessments

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Computer Adaptive Technology
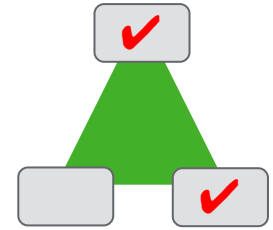
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Faster results, fewer items	• **Turnaround time is significantly reduced** • **Can assess broad range with fewer items**
Deeper Analysis	• **Reports for classrooms and schools draw from the full range of items seen by many students**
Increased precision	• **Accurate measurement across range of students** • **Improved measures of student growth over time**
Tailored to student ability	• **Item difficulty based on student responses**
Greater security	• **Large item pool means not all students receive the same questions**
Mature technology	• **GMAT, GRE, COMPASS (ACT), Measures of Academic Progress (MAP)**

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Formative Tools for Classroom- Based Assessment Practices
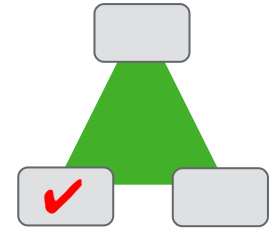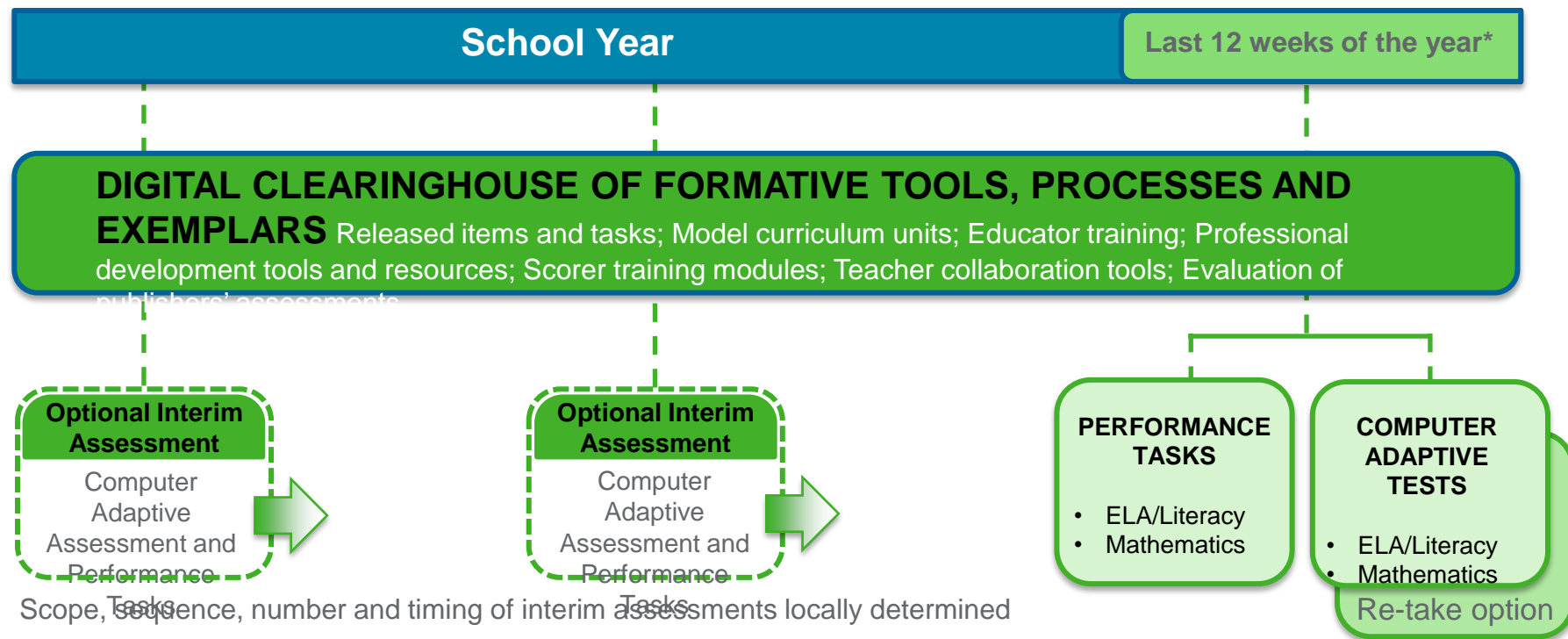
Improving Instruction
- Tools/materials for Classroom-based Assessments
- Fully aligned to Common Core State Standards
- Available for in-service and pre-service development

Pooling Resources
- Access to the best resources available
- Collaborate with other states on special projects
- Professional social networking across the Consortium
- Tools to evaluate publishers' tests

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A Balanced Assessment System

English Language Arts/Literacy and Mathematics, Grades 3-8 and High School

School Year	Last 12 weeks of the year*

DIGITAL CLEARINGHOUSE OF FORMATIVE TOOLS, PROCESSES AND EXEMPLARS Released items and tasks; Model curriculum units; Educator training; Professional development tools and resources; Scorer training modules; Teacher collaboration tools; Evaluation of publishers' assessments

Optional Interim Assessment

Computer Adaptive Assessment and Performance Tasks

Optional Interim Assessment

Computer Adaptive Assessment and Performance Tasks

Scope, sequence, number and timing of interim assessments locally determined

PERFORMANCE TASKS

- ELA/Literacy
- Mathematics

COMPUTER ADAPTIVE TESTS

- ELA/Literacy
- Mathematics

Re-take option

*Time windows may be adjusted based on results from the research agenda and final implementation decisions.

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Recent and Upcoming Developments

Recent and Upcoming Developments
(www.smarterbalanced.org)

- Early October
  - Release of 50 **sample Items and Tasks**, using prototype online delivery system

- Mid November
  - Adoption of Summative **Assessment Blueprint**
    - Allocation of points
    - Testing times
    - Breadth and depth of coverage of Common Core

Recent and Upcoming Developments
(www.smarterbalanced.org)

- Late November
  - **Recruitment of schools** for Spring 2013 **pilot testing**
    - Statistical sample of 1M from Governing States
    - Pilot opportunity open to all schools
    - Pilot testing Feb. 20 – May 10, 2013

- Late November
  - Review/comment period opens for **Achievement Level Descriptors** (ALDs)
    - Open for comments through January 15
    - ALDs for all tested grades
    - Governing State adoption in March

Recent and Upcoming Developments
(www.smarterbalanced.org)

- Early December
  - **<u>Minimum technology specifications:</u>** Hardware, operating systems, and bandwidth

- Mid January
  - Completion of **<u>Validity Framework</u>** for Smarter Balanced
    - Lays out research agenda to validate assessment claims and Theory of Action

Online Assessment: Getting ready for the technology

Guidelines for <u>NEW</u> Technology Purchases

(v1.0 Apr. 2012)

Minimum for New Hardware	Processor Speed	RAM	Available Memory/Storage	Resolution	Display Size
	1.0 GHz	1 GB	1 GB	1024x768	10" Class

Operating Systems	✓ Windows 7 ✓ Mac 10.7 ✓ Linux (Ubuntu 11.10; Fedora 16)	✓ Chrome ✓ Apple iOS 6 ✓ Android 4.0

Desktops, laptops, netbooks (Windows, Mac, Chrome, Linux), thin client, and tablets (iPad, Windows, and Android) will be compatible devices provided they are configured to meet the established hardware, operating system, and networking specifications -- and are able to be "locked down".

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Guidelines for EXISTING Technology

- Released Dec. 4
- Details and reports available on Smarter Balanced Web site

- Online school technology survey at:

http://www.smarterbalanced.org/smarter-balanced-assessments/technology/

Aligning to the Common Core: Assessing deeper learning

Assessment Claims for ELA/Literacy

Overall Claim for Grades 3-8	"Students can demonstrate progress toward college and career readiness in English Language arts and literacy."
Overall Claim for Grade 11	"Students can demonstrate college and career readiness in English language arts and literacy."
Claim #1 - Reading	"Students can read closely and analytically to comprehend a range of increasingly complex literary and informational texts."
Claim #2 - Writing	"Students can produce effective and well-grounded writing for a range of purposes and audiences."
Claim #3 - Speaking and Listening	"Students can employ effective speaking and listening skills for a range of purposes and audiences."
Claim #4 - Research/Inquiry	"Students can engage in research and inquiry to investigate topics, and to analyze, integrate, and present information."

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Assessment Claims for Mathematics

Overall Claim for Grades 3-8	"Students can demonstrate progress toward college and career readiness in mathematics."
Overall Claim for Grade 11	"Students can demonstrate college and career readiness in mathematics."
Claim #1 - Concepts & Procedures	"Students can explain and apply mathematical concepts and interpret and carry out mathematical procedures with precision and fluency."
Claim #2 - Problem Solving	"Students can solve a range of complex well-posed problems in pure and applied mathematics, making productive use of knowledge and problem solving strategies."
Claim #3 - Communicating Reasoning	"Students can clearly and precisely construct viable arguments to support their own reasoning and to critique the reasoning of others."
Claim #4 - Modeling and Data Analysis	"Students can analyze complex, real-world scenarios and can construct and use mathematical models to interpret and solve problems."

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Depth of Knowledge (DOK) Analysis of Smarter Balanced Assessment Targets

Math Grade 11

Claim	Target	Abbreviation
1: Conc/Procedures	A	Number: Rational exponents
1: Conc/Procedures	B	Nmber: Rational/Irrational
1: Conc/Procedures	C	Nmber: Using units
1: Conc/Procedures	D	Alg: Structure of exprsions
1: Conc/Procedures	E	Alg: Equiv exprsions
1: Conc/Procedures	F	Alg: Polynomial arithmetic
1: Conc/Procedures	G	Alg: Create equations
1: Conc/Procedures	H	Alg: Solving = Reasoning
1: Conc/Procedures	I	Alg: One-variable inequalities
1: Conc/Procedures	J	Alg: Inequalities graphically
1: Conc/Procedures	K	Fns: Functional notation
1: Conc/Procedures	L	Fns: Interpret fns
1: Conc/Procedures	M	Fns: Analyze fns
1: Conc/Procedures	N	Fns: 2-var modelling
1: Conc/Procedures	O	Geo: Prove theorems
1: Conc/Procedures	P	Stat/Prob: Summarize/interpret
2: Prob Solving	A	Solve well-posed probs
2: Prob Solving	B	Use appropriate tools
2: Prob Solving	C	Interpret results
2: Prob Solving	D	ID quantities & relationships
3: Reasoning	A	Test propositions
3: Reasoning	B	Chains of reasoning

Some of the assessment targets for Gr 11 Mathematics (from Content Specifications document)

Depth of Knowledge (DOK) Analysis of Smarter Balanced Assessment Targets

Math Grade 11

Claim	Target	Abbreviation	DOK 1	DOK 2	DOK 3	DOK 4
1: Conc/Procedures	A	Number: Rational exponents	█			
1: Conc/Procedures	B	Nmber: Rational/Irrational	█			
1: Conc/Procedures	C	Nmber: Using units	█			
1: Conc/Procedures	D	Alg: Structure of exprsions	█			
1: Conc/Procedures	E	Alg: Equiv exprsions	█			
1: Conc/Procedures	F	Alg: Polynomial arithmetic	█			
1: Conc/Procedures	G	Alg: Create equations	█	█		
1: Conc/Procedures	H	Alg: Solving = Reasoning	█	█		
1: Conc/Procedures	I	Alg: One-variable inequalities	█			
1: Conc/Procedures	J	Alg: Inequalities graphically	█			
1: Conc/Procedures	K	Fns: Functional notation	█			
1: Conc/Procedures	L	Fns: Interpret fns	█	█		
1: Conc/Procedures	M	Fns: Analyze fns	█		█	
1: Conc/Procedures	N	Fns: 2-var modelling	█	█		
1: Conc/Procedures	O	Geo: Prove theorems		█		
1: Conc/Procedures	P	Stat/Prob: Summarize/interpret		█		
2: Prob Solving	A	Solve well-posed probs	█	█	█	
2: Prob Solving	B	Use appropriate tools	█	█		
2: Prob Solving	C	Interpret results		█	█	
2: Prob Solving	D	ID quantities & relationships	█	█	█	
3: Reasoning	A	Test propositions		█		
3: Reasoning	B	Chains of reasoning		█	█	█
3: Reasoning	C	Logical assumptions		█	█	
3: Reasoning	D	Deconstruct arguments		█	█	
3: Reasoning	E	Correct vs. flawed reasoning		█	█	█
3: Reasoning	F	Concrete referents		█	█	
3: Reasoning	G	When argument applies		█	█	█
4: Modeling	A	Apply math to probs		█	█	
4: Modeling	B	Reasoning w complex probs		█	█	█
4: Modeling	C	ID logical assumptions	█	█		
4: Modeling	D	Interpret results	█	█	█	
4: Modeling	E	Analyze existing model		█	█	
4: Modeling	F	ID quantities & relationships	█	█		
4: Modeling	G	Synthesize external sources			█	█
			18	27	15	6	66
			27%	41%	23%	9%	

Example: Gr 11 Math

DOK 1	DOK 2	DOK 3	DOK 4
27%	41%	23%	9%
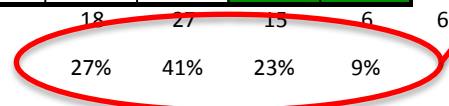
Assessing Deeper Levels of Cognition

- Measuring the CCSS taps higher levels of Depth of Knowledge than current state tests

	DOK 1	DOK 2	DOK 3	DOK 4
ELA Gr 4	24%	35%	28%	13%
Math Gr 4	25%	40%	26%	9%
ELA Gr 8	20%	31%	31%	17%
Math Gr 8	18%	43%	27%	12%
ELA HS	22%	29%	29%	20%
Math HS	27%	41%	23%	9%

Scores Reported for Individual Students

English Language Arts		
#	**Claims**	**Weights for Composite**
1	Reading	% (TBD*)
2	Writing	% (TBD*)
3	Speaking/Listening	% (TBD*)
4	Research	% (TBD*)
Total Composite		100%

Mathematics		
#	**Claims**	**Weights for Composite**
1	Concepts & Procedures	% (TBD*)
2 & 4	Problem Solving & Modeling & Data Analysis	% (TBD*)
3	Communicating Reasoning	% (TBD*)
Total Composite		100%

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Estimated Testing Times for 2015 Operational Assessment

Test Type	Grades	CAT	Perf. Task Only	Total	Class Activity	Total
English Language Arts	**3-5**	1:30	2:00	**3:30**	:30	**4:00**
	6-8	1:30	2:00	**3:30**	:30	**4:00**
	11	2:00	2:00	**4:00**	:30	**4:30**
Mathematics	**3-5**	1:30	1:00	**2:30**	:30	**3:00**
	6-8	2:00	1:00	**3:00**	:30	**3:30**
	11	2:00	1:30	**3:30**	:30	**4:00**
COMBINED	**3-5**	3:00	3:00	**6:00**	1:00	**7:00**
	6-8	3:30	3:00	**6:30**	1:00	**7:30**
	11	4:00	3:30	**7:30**	1:00	**8:30**

Times are estimates of test length for most students. Smarter Balanced assessments are designed as untimed tests; some students may need and should be afforded more time than shown in this table.

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Exploring the Smarter Balanced Sample Items and Tasks

Purpose of Sample Items and Performance Tasks

- Demonstrate rigor and complexity of ELA/literacy and mathematics questions

- Showcase variety of item types:
  - Selected response
  - Constructed response
  - Technology enhanced
  - Performance tasks

- Help teachers to begin planning for the shifts in instruction

Sample Items and Tasks available on SmarterBalanced.org

Sample Items and Tasks Navigation

Filter By: Technology Enhanced | Performance Tasks | Connections Across Grades | Difficulty Progressions

Grade Band	Concepts and Procedures	Problem Solving	Communicating Reasoning	Modeling and Data Analysis	Performance Tasks
3-5	Fractions 1 Multiplication and Division Fractions 3	Fractions 2a Fractions 2b Rectangle 1 Rectangle 2	The Contest Swimmers		Planting Tulips
6-8	Expressions and Equations 1 Expressions and Equations 2 Expressions and Equations 3 Integer Expressions	Sandbags 1 Sandbags 2 Calculator			Field Trip
High School	Rationals and Radicals	Circle 1 Circle 2 Used Car Water Tank	Room Wall Decibels	eBooks Two-Second Rule	Crickets

Grade bands

Content Claims

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Sample Items and Tasks Navigation

Filter by item type, themes

Filter By: Technology Enhanced | Performance Tasks | Connections Across Grades | Difficulty Progressions

Grade Band	Concepts and Procedures	Problem Solving	Communicating Reasoning	Modeling and Data Analysis	Performance Tasks
3-5	Fractions 1 Multiplication and Division Fractions 3	Fractions 2a Fractions 2b Rectangle 1 Rectangle 2	The Contest Swimmers		Planting Tulips
6-8	Expressions and Equations 1 Expressions and Equations 2 Expressions and Equations 3 Integer Expressions	Sandbags 1 Sandbags 2 Calculator			Field Trip
High School	Rationals and Radicals	Circle 1 Circle 2 Used Car Water Tank	Room Wall Decibels	eBooks Two-Second Rule	Crickets

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Item Metadata

The "About This Item" feature

ABOUT THIS ITEM

Grandma Ruth 1

Grade: 4

Claim 1: Students can read closely and analytically to comprehend a range of increasingly complex literary and informational texts.

Target 2. CENTRAL IDEAS: Identify or summarize central ideas/ key events.

CCSS: RL-2

This item asks students to consider a specific subsection of the text and the general topic of that section.

View Rubric (PDF)

View Text Complexity Analysis Placemat (PDF)

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